IN THE CLAIMS:

1. (currently amended) A method for manufacturing a polymer alloy, comprising the step of:

melt blending at least two resins, which are ~~used as components~~ miscible under ~~such shear flow as caused by the~~ a shear rate ~~kept in a range from~~ of 100 to 10000 sec^{-1} and ~~capable of being~~ are separated into phases under no shear flow, [[for]] and making the resins miscible; and

subsequently inducing spinodal decomposition ~~to cause phase separation, for~~ and forming a co-continuous structure with a wavelength of concentration fluctuation of ~~0.001 to 1~~ 0.001 to 0.5 μm or a dispersed structure with a distance between particles of ~~0.001 to 1~~ 0.001 to 0.5 μm;

wherein said at least two resins are selected from a combination of a polycarbonate (PC) and styrene-acrylonitrile copolymer, a combination of PC and polybutylene terephthalate (PBT), a combination of PC and polyethylene terephthalate, a combination of PC and polypropylene terephthalate, a combination of polystyrene and polyvinyl methyl ether, a combination of polystyrene and polyisoprene, a combination of polystyrene and polyphenylmethylsiloxane, a combination of ethylene-vinyl acetate copolymer and chlorinated polyethylene, a combination of poly(butyl

acrylate) and chlorinated polyethylene, a combination of polymethyl methacrylate and styrene-acrylonitrile copolymer, a combination of polypropylene and ethylene-α-olefin copolymer, a combination of polypropylene and ethylene-polypropylene copolymer, a combination of polypropylene and styrene-butadiene copolymer, a combination of PC and styrene-butadiene copolymer, a combination of PC and the hydrogenation product of styrene-butadiene copolymer, a combination of PBT and styrene-butadiene copolymer, and a combination of PBT and the hydrogenation product of styrene-butadiene copolymer.

2. (currently amended) A method for manufacturing a polymer alloy, according to claim 1, wherein in the early stage of said spinodal decomposition, a co-continuous structure with a wavelength of concentration fluctuation of ~~0.001 to 1~~ 0.001 to 0.5 μm is formed.

3 - 5. (canceled)

6. (currently amended) Polymer alloy pellets, comprising at least two resins ~~contained as components~~, wherein the at least two resins ~~contained as components~~ form a co-continuous structure with a wavelength of concentration fluctuation of ~~0.001 to 1~~ 0.001 to

0.5 μm or a dispersed structure with a distance between particles of ~~0.001 to 1~~ 0.001 to 0.5 μm;

wherein said at least two resins are selected from a combination of a polycarbonate (PC) and styrene-acrylonitrile copolymer, a combination of PC and polybutylene terephthalate (PBT), a combination of PC and polyethylene terephthalate, a combination of PC and polypropylene terephthalate, a combination of polystyrene and polyvinyl methyl ether, a combination of polystyrene and polyisoprene, a combination of polystyrene and polyphenylmethylsiloxane, a combination of ethylene-vinyl acetate copolymer and chlorinated polyethylene, a combination of poly(butyl acrylate) and chlorinated polyethylene, a combination of polymethyl methacrylate and styrene-acrylonitrile copolymer, a combination of polypropylene and ethylene-α-olefin copolymer, a combination of polypropylene and ethylene-polypropylene copolymer, a combination of polypropylene and styrene-butadiene copolymer, a combination of PC and styrene-butadiene copolymer, a combination of PC and the hydrogenation product of styrene-butadiene copolymer, a combination of PBT and styrene-butadiene copolymer, and a combination of PBT and the hydrogenation product of styrene-butadiene copolymer.

7. (original) Polymer alloy pellets, according to claim 6, wherein said at least two resins are a thermoplastic polyester resin and a polycarbonate.

8. (original) Polymer alloy pellets, according to claim 7, wherein said thermoplastic polyester resin is polybutylene terephthalate.

9. (currently amended) A polymer alloy film or sheet, comprising at least two resins ~~contained as components~~, wherein the at least two resins ~~contained as components~~ form a co-continuous structure with a wavelength of concentration fluctuation of ~~0.001 to 1~~ 0.001 to 0.5 μm or a dispersed structure with a distance between particles of ~~0.001 to 1~~ 0.001 to 0.5 μm;

wherein said at least two resins are selected from a combination of a polycarbonate (PC) and styrene-acrylonitrile copolymer, a combination of PC and polybutylene terephthalate (PBT), a combination of PC and polyethylene terephthalate, a combination of PC and polypropylene terephthalate, a combination of polystyrene and polyvinyl methyl ether, a combination of polystyrene and polyisoprene, a combination of polystyrene and polyphenylmethylsiloxane, a combination of ethylene-vinyl acetate

copolymer and chlorinated polyethylene, a combination of poly(butyl acrylate) and chlorinated polyethylene, a combination of polymethyl methacrylate and styrene-acrylonitrile copolymer, a combination of polypropylene and ethylene-α-olefin copolymer, a combination of polypropylene and ethylene-polypropylene copolymer, a combination of polypropylene and styrene-butadiene copolymer, a combination of PC and styrene-butadiene copolymer, a combination of PC and the hydrogenation product of styrene-butadiene copolymer, a combination of PBT and styrene-butadiene copolymer, and a combination of PBT and the hydrogenation product of styrene-butadiene copolymer.

10. (original) A polymer alloy film or sheet, according to claim 9, wherein a co-continuous structure with a wavelength of concentration fluctuation of 0.001 to less than 0.01 μm or a dispersed structure with a distance between particles of 0.001 to less than 0.01 μm is formed.

11. (currently amended) A polymer alloy film or sheet, according to claim 10, wherein said co-continuous structure or dispersed structure is formed by the phase separation caused by the spinodal decomposition induced in the at least two resins ~~contained as components~~.

12. (currently amended) A polymer alloy film or sheet, according to claim 9, wherein said at least two resins ~~contained as components~~ are polybutylene terephthalate and a polycarbonate.

13. (currently amended) A molded polymer alloy article, comprising at least two resins ~~contained as components~~, wherein the at least two resins ~~contained as components~~ form a co-continuous structure with a wavelength of concentration fluctuation of ~~0.001 to 1~~ 0.001 to 0.5 μm or a dispersed structure with a distance between particles of ~~0.001 to 1~~ 0.001 to 0.5 μm;

wherein said at least two resins are selected from a combination of a polycarbonate (PC) and styrene-acrylonitrile copolymer, a combination of PC and polybutylene terephthalate (PBT), a combination of PC and polyethylene terephthalate, a combination of PC and polypropylene terephthalate, a combination of polystyrene and polyvinyl methyl ether, a combination of polystyrene and polyisoprene, a combination of polystyrene and polyphenylmethylsiloxane, a combination of ethylene-vinyl acetate copolymer and chlorinated polyethylene, a combination of poly(butyl acrylate) and chlorinated polyethylene, a combination of polymethyl methacrylate and styrene-acrylonitrile copolymer, a combination of polypropylene and ethylene-α-olefin copolymer, a combination of

polypropylene and ethylene-polypropylene copolymer, a combination of polypropylene and styrene-butadiene copolymer, a combination of PC and styrene-butadiene copolymer, a combination of PC and the hydrogenation product of styrene-butadiene copolymer, a combination of PBT and styrene-butadiene copolymer, and a combination of PBT and the hydrogenation product of styrene-butadiene copolymer.

14. (original) A molded polymer alloy article, according to claim 13, wherein said molded polymer alloy article is a molded article obtained by injection molding.

15. (currently amended) A molded polymer alloy article, according to claim 13, wherein said at least two resins ~~contained as components~~ are polybutylene terephthalate and a polycarbonate.

16. (currently amended) A polymer alloy, comprising polybutylene terephthalate and a polycarbonate, and forming a co-continuous structure with a wavelength of concentration fluctuation of ~~0.001 to 1~~ 0.001 to 0.5 μm or a dispersed structure with a distance between particles of ~~0.001 to 1~~ 0.001 to 0.5 μm.

17. (original) A polymer alloy, according to claim 16, wherein said co-continuous structure or dispersed structure is formed by the phase separation caused by the spinodal decomposition.

18. (original) A polymer alloy, according to claim 16, wherein said polymer alloy is miscible when the shear rate is kept in a range from 100 to 10000 sec^{-1}, and is separated into phases under no shear flow.

19. (withdrawn) A polymer alloy, comprising polyphenylene sulfide resin and a polyester resin with polyethylene terephthalate as a main component, and forming a co-continuous structure with a wavelength of concentration fluctuation of 0.001 to 2 μm or a dispersed structure with a distance between particles of 0.001 to 2 μm.

20. (withdrawn) A polymer alloy, according to claim 19, wherein said co-continuous structure or dispersed structure is formed by the phase separation caused by the spinodal decomposition.

21. (withdrawn) A polymer alloy, according to claim 20, wherein said polymer alloy is miscible when the shear rate is kept in a range from 100 to 10000 sec^{-1}, and is separated into phases under no shear flow.